

DEVIL WINDS

1970





Forest Service U. S. Department of Agriculture California



DEVIL WINDS — 1970

Toward the end of the rainless summer, a pronounced high pressure area far to the north can have a drastic effect on Southern California weather. Dry air from the interior is forced westward toward the coast over the San Gabriels, the San Bernardinos, and the coastal mountains. As this air moves through the higher elevation forests, and down the steep foothill escarpments, it becomes gusty, hot and dry, roaring as it funnels down the canyons.

When these scorching winds pass, they take with them much of the natural moisture of the vegetation—what little is left, that is, after a long and dry summer. They leave behind a parched landscape where even the processes of nature seem dormant—as if waiting. These are the “Santa Anas,” the so-called “devil winds.”

And that’s the way it was early Friday, September 25, 1970 in most of Southern California. The Santa Anas had started blowing strongly from the northeast. Temperatures climbed while the humidity fell.

This set of conditions—dry vegetation, low humidity, heat and strong desert winds—spell potential disaster. Disaster in the form of fire which spreads nearly at the speed of the wind. Fire that engulfs brush and trees, sending sparks with the updrafts to start satellite fires where they land in advance of the main blaze.

Fire protection forces—Federal, State, and local—are apprehensive at times like these. Available crews are reinforced and on “alert.” Equipment is ready to roll, but it always seems like a small force to muster against overwhelming odds. In weather like this, forest fire lookouts tend to ignore visitors to their ridgetop towers. Their intermittent radio reports are cryptic, almost mechanical. A distant cloud of dust stirred by a passing car gets their immediate attention.



That Friday morning temperatures were pushing 100 degrees, and the humidity in many places had dropped far below 10 percent. News media and fire prevention patrolmen were doing their best to warn of the danger. A number of fires had been stopped while still small, but conditions were right for something really deadly. By noon, four fires were out of control and spreading fast, and at two o'clock the situation was rapidly becoming worse. The Riverside Ranger Unit, of the California Division of Forestry, alone had reported 12 fires in the previous four hours. Additional crews and fire trucks had been requested from as far away as the San Francisco Bay Area.

By noon Saturday, four fires north of Los Angeles had merged into one flaming perimeter reaching from Newhall Pass—some 25 miles inland—to Malibu on the coast. And it was spreading before the wind. Fire after fire started—while some of those which were already burning became monstrous. By late Saturday, one of the worst series

of fires in the recorded history of Southern California was burning out of control. Major fires raged unchecked in seven counties. Already over 180,000 acres of brushland had been blackened, and 256 homes destroyed.



Of the many fires which started that Sunday, six escaped control. By Monday one blaze alone had devastated over 160,000 acres east of San Diego—and it was still out of control. Fires had devoured 115,000 acres bordering the Los Angeles Basin, and for a fourth straight day various other fires advanced before 60-mile-an-hour winds, despite the efforts of thousands of weary firefighters battling in temperatures of over 100 degrees.





In other parts of the State, scores of new fires had started. Fortunately prompt and efficient firefighting forces—local, State, and Federal—kept most of these blazes well under control and limited in area.

Law enforcement personnel saved many lives by directing the orderly evacuations of threatened homes, and keeping the traffic flowing for incoming fire equipment.

Meanwhile, President Nixon and Governor Reagan declared the fire areas to be disaster areas, and all Civil Defense forces were activated.



By late Wednesday, some 50 fires had swept more than 400,000 acres of California brush and woodlands. But the weather looked better, and it appeared the week-long destruction by fire was at an end. In hard-hit areas of both Los Angeles and San Diego isolated pockets of fire still burned in rugged canyons; however, for the most part, the crisis seemed passed.

But on Thursday the devil winds, again rising from the desert, renewed the wild rush of flames east of Los Angeles and northwest of San Bernardino. Gusts reaching 70 miles per hour lofted sparks to Cucamonga Canyon, and in San Diego County over 1,500 fire-fighters fought flame along a 25-mile front. Two fires still burned near Bakersfield. The Sequoia National Forest had lost over \$8 million in timber despite efforts of 1,500 men.



While firemen in the Los Padres National Forest, south of Monterey, were containing a 40,000-acre blaze, a new fire broke out in second-growth redwoods in Northern California's Humboldt County.

Finally, on Saturday October 3rd, relief came to Southern California in the form of showers. They ranged from .02 inch to one inch, but were sufficient to raise the humidity and hold down the flames. Still

an "extreme fire hazard" existed in Northern California, and the Forest Service temporarily closed most of the National Forests in California hoping to prevent further outbreaks.

By the start of the new week, the fires were controlled. Roughly half a million acres of vegetation on watershed, timber, and recreation lands had been burned. The tinder-dry fuels and hot desert Santa Anas had combined to cause the greatest number of large-scale fires to burn out of control at a given time in many years. Nearly 800 homes and 200 other structures were burned, and 14 persons had lost their lives as direct consequences of the fires.



Now comes the task of trying to prevent floods when winter rains arrive. Hillsides, bare of vegetation, invite floods and mudslides. Even moderate rains run rapidly off the hills and become a mass of gravel and gooey mud pushing downhill, filling reservoirs and inundating everything in its path. It's a massive job of clearing stream channels and modifying road drainage systems . . . of building flood control structures . . . of spreading tons of grass seeds over the recently burned countryside . . . while hoping the first rains will be gentle and give the grass a chance to sprout and hold the earth. Even so, many hundreds of homes which escaped the flames now face the danger of being destroyed by floods. These are the consequences of a disaster which

has already cost many million dollars in damage to property and natural resources, and in costs of suppressing the fire—plus a toll in lives lost.



What can be done to make the future more secure for those hundreds of thousands of Southern Californians living in brush-covered areas?

The possibility of brush fire can never be eliminated, but means for more efficient protection of life, property, and watersheds can be instituted. For one thing, the amount of flammable vegetation can be reduced along roads and around homes and other structures. This protection can be implemented with strict zoning laws and residential brush-clearing programs to make every community "fire safe."

In selected areas, vegetation can be replaced by grass or plants more resistant to fire. Where soil, geology, and topography are suitable, large areas may be converted from highly flammable brush to less flammable perennial grasses which can slow the rate of the spread of fire. This conversion of the vegetation may be done effectively immediately following a fire by "drilling" perennial grass seeds. Then these areas must be maintained to keep them free from sprouting brush.

In other large expanses of brush, where topography does not permit general vegetative type conversions, fuelbreaks along ridges or in other selected areas can be planted with perennial grasses to provide not only safe buffer areas from which to fight the advance of a fire, but also suitable access for crews and equipment.

Research can develop more effective methods of firefighting and quicker ways to revegetate burned lands. More fire crews are needed, along with ground equipment and aircraft. Last, but certainly not least, the entire population must be made more aware of the need for preventing fire.

Determining the management "prescription" which would offer reasonable protection—while keeping costs tolerable—will be a complex, difficult job. It will require the close cooperation of scientists, technicians, engineers, planners, environmentalists, and the general public. But this must be done—if the citizens are to have the protection to which they are entitled.



MAJOR FIRES — September 25 to October 3, 1970

Name	Acres	Location
Agua Dulce	22,435	Los Angeles Co. — Angeles N.F.
Boulder	12,700	San Diego Co. — Cleveland N.F.
Buckeye	44,000	Monterey Co., San Luis Obispo Co. — Los Padres N.F.
Camp Grant	2,500	Humboldt Co.
Casco	4,982	Riverside Co.
Foothill	5,241	Ventura City and Co.
Fork	3,600	Los Angeles Co. — Angeles N.F.
Laguna	175,425	San Diego Co. — Cleveland N.F.
Malibu	27,925	Los Angeles Co.
Meyers	34,869	San Bernardino Co. — San Bernardino N.F.
Newhall	107,163	Los Angeles Co. — Ventura Co.
Rankin	35,000	Kern Co. — Sequoia N.F.
Red Mountain	25,600	Kern Co. — Sequoia N.F.
Tecate	7,000	San Diego Co. and Mexico
Trabuco	2,795	Orange Co.
Val Verde	7,270	Los Angeles Co. — Ventura Co.

518,505 ACRES
FROM MAJOR FIRES
IN AN 8 DAY
PERIOD.



